9. MASTER CLAMP & LOADING SECTIONS

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9. Master Clamp & Loading Sections

[Removal and Assembly]

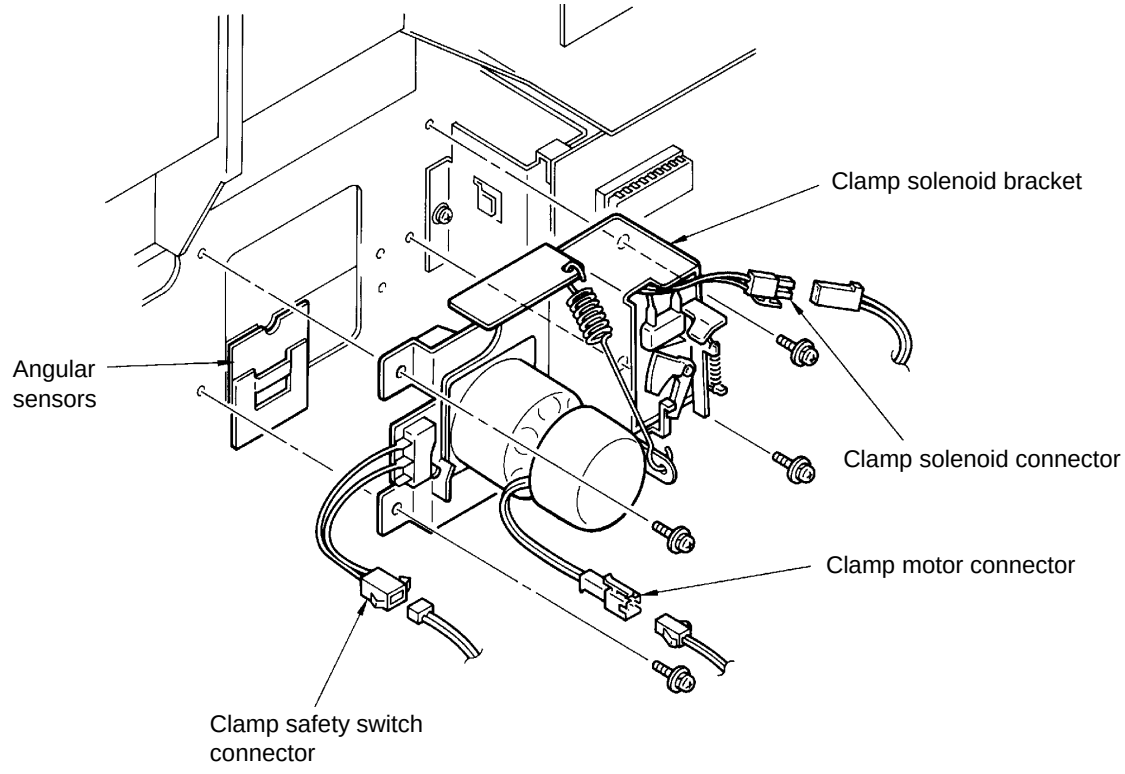
1. Clamp Unit

< Removal Procedure >

1. Turn OFF the power and remove the Back cover.
2. Disconnect the Clamp unit connector wires; e.g. Clamp solenoid, Clamp motor and Clamp safety switch.
3. Remove four mounting screws on the Clamp unit and remove the unit from the machine.

- Precautions in Assembly -

- M4x6 double-washer screws should be used in mounting the Clamp unit onto the machine. If longer screws are used, the screws will get contact with the Drum and interfere with the Drum rotation.



2. Clamp Motor
3. Clamp Solenoid

2. Clamp Motor

< Removal Procedure >

1. Remove the Clamp unit, referring to the previous page.
2. Remove four mounting screws of the Clamp motor and remove the motor from the Clamp unit.

- Precautions in Assembly -

- Lightly grease the Drive gear of the Clamp motor.
- Apply Loctite to the mounting screws of the Calmp motor after attaching the motor back on the Clamp unit.

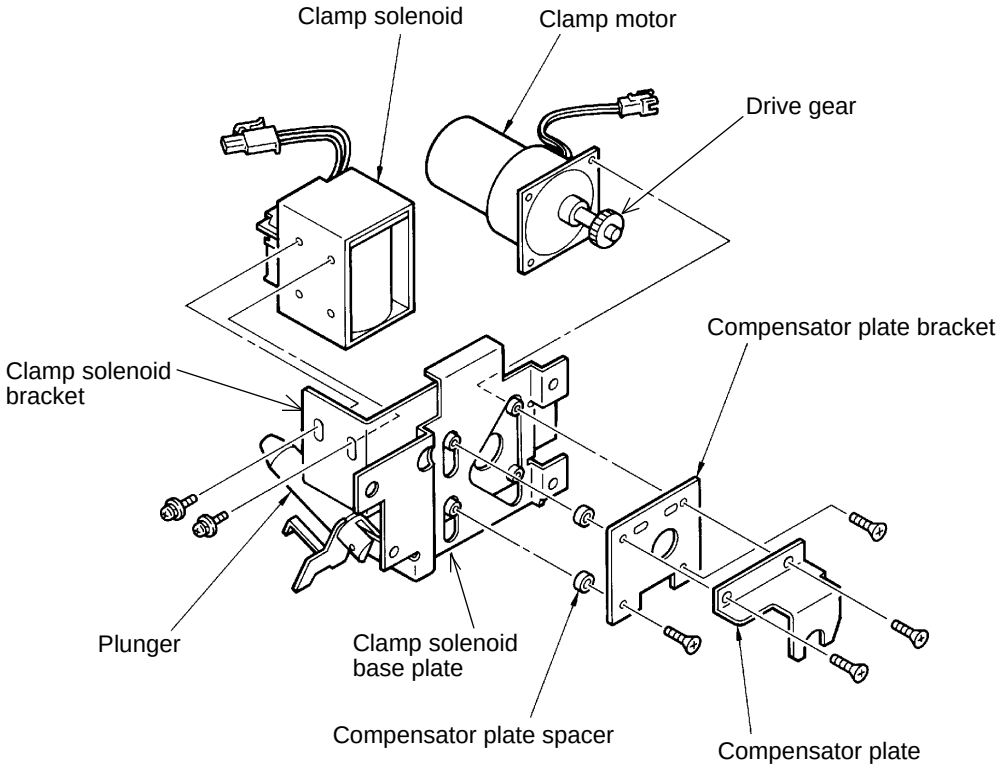
3. Clamp Solenoid

< Removal Procedure >

1. Remove the Clamp unit, referring to the previous page.
2. Remove two mounting screws of the Clamp solenoid and remove the solenoid from the Clamp unit, separating it from the Plunger.

- Precautions in Assembly -

- Lightly grease the sliding surface between the Clamp solenoid base plate and Clamp solenoid bracket.



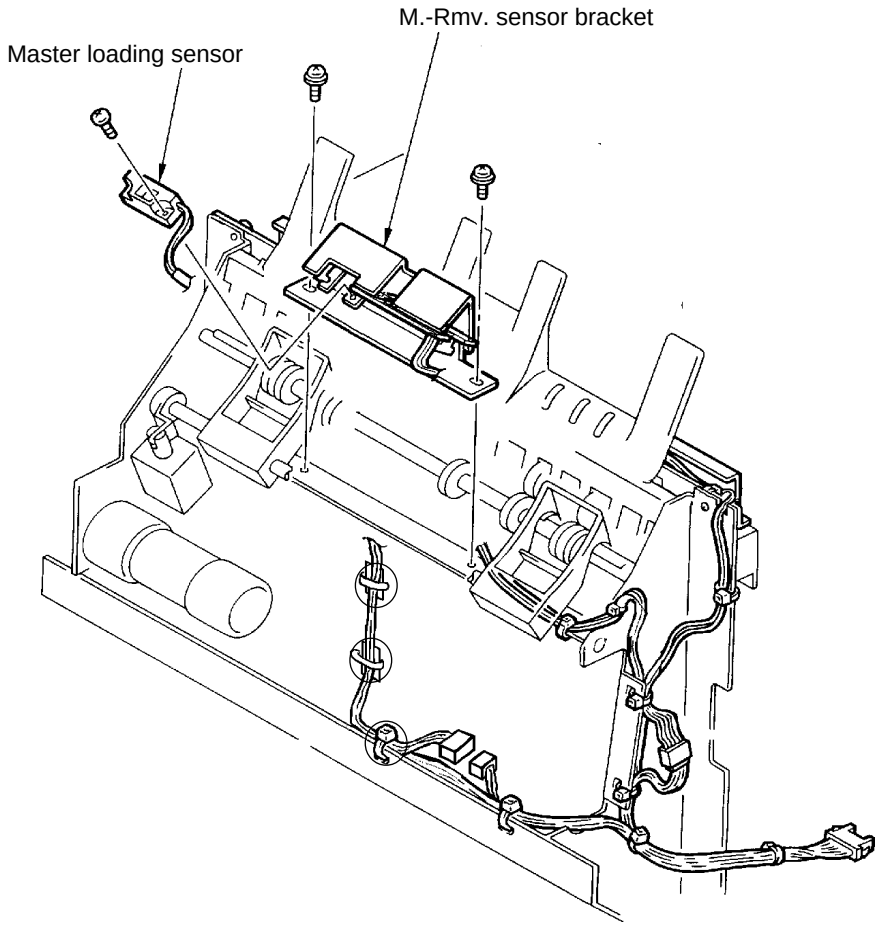
4. Master Loading Sensor

< Removal Procedure >

1. Remove the Master removal unit, referring to page VIII-7 or VIII-8.
2. Remove the mounting screw on the Master loading sensor and separate the sensor from the M.-Rmv. sensor bracket.
3. Disconnect the Master loading sensor connector and cut the wire clampers securing the wires of the sensor to the Master removal unit frame.
   Remove the sensor from the Master removal unit.

- Precautions in Assembly -

- Secure the wires of the sensor with wire clampers as before removal.



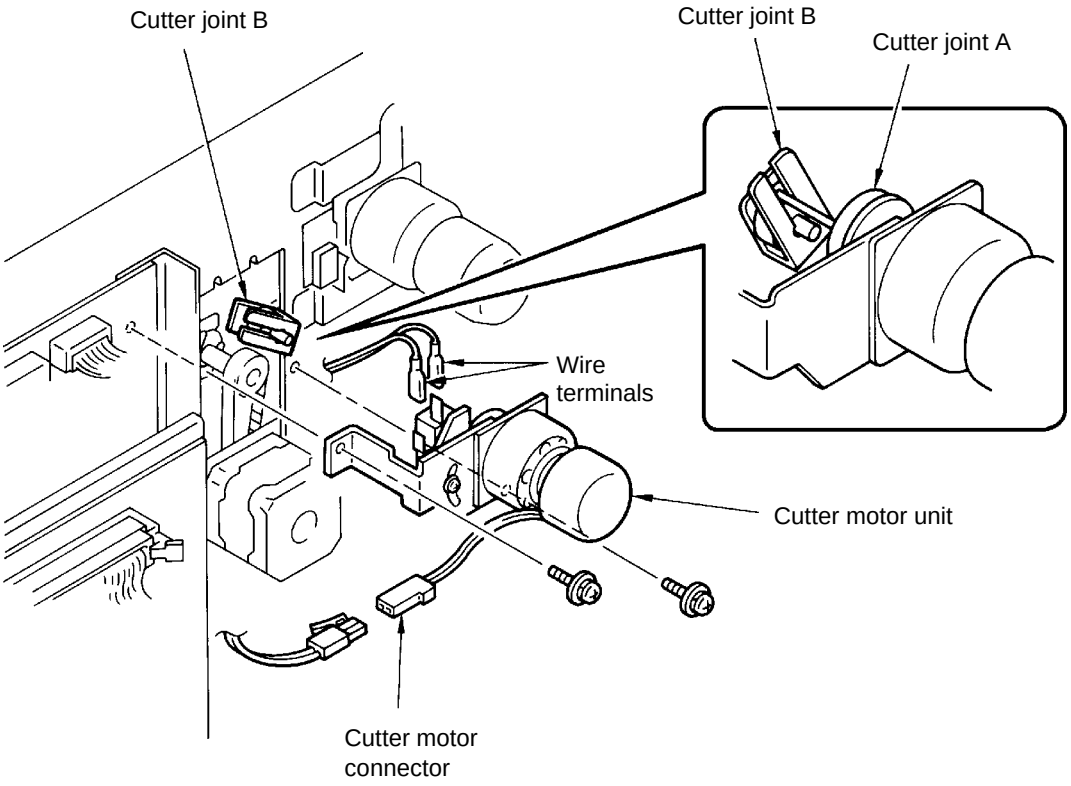
5. Cutter Motor Unit

< Removal Procedure >

1. Turn OFF the power and remove the Back cover.
2. Disconnect the Cutter motor connector.
3. Remove two mounting screws on the Cutter motor unit, unplug two wire terminals from the Cutter position switch and remove the Cutter motor unit.

- Precautions in Assembly -

- Ensure proper alignment of Cutter joint A (joint pin) into the slit of Cutter joint B.



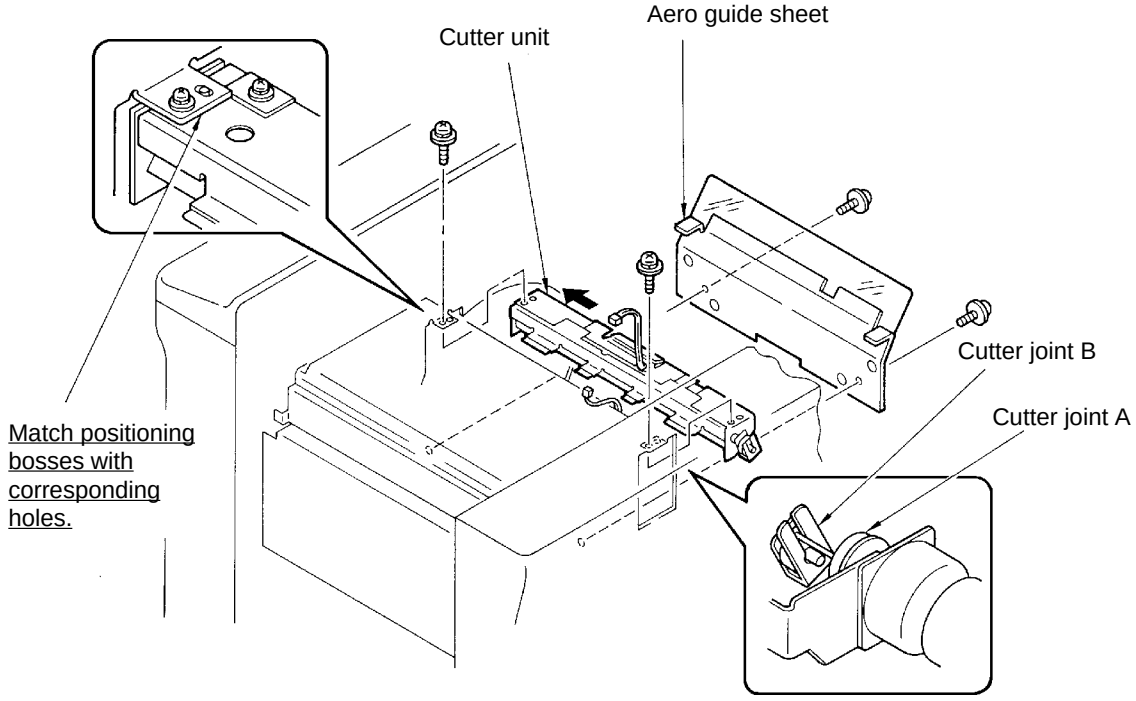
6. Cutter Unit

< Removal Procedure >

1. Pull out the Drum, turn OFF the power and remove the Back cover.
2. Remove the Upper cover (RA4200 & 4900 only).
3. Remove two mounting screws on the Aero guide sheet and remove the sheet.
4. Disconnect the Master positioning sensor connector.
5. Remove two mounting screws of the Cutter unit and remove the unit from the opening for Drum replacement, holding it from underneath.

- Precautions in Assembly -

- Do not bend or damage the green films, i.e. Set sheets A and B.
- Be sure to use M4x6 double-washer screws when securing the Cutter unit.
  If longer screws are used, they will make contact with the upper Cutter blade and lock it up.
- When mounting the Cutter unit back in the machine, match the respective positioning bosses on the Cutter unit with the corresponding holes of the mounting brackets. Otherwise, wrinkles will occur while loading a master onto the Drum.
- Insert the joint pin of Cutter joint A into the slit of Cutter joint B.
- After installing the Cutter unit, ensure that the upper Cutter blade moves smoothly with Test mode **No.112**, before setting the master.



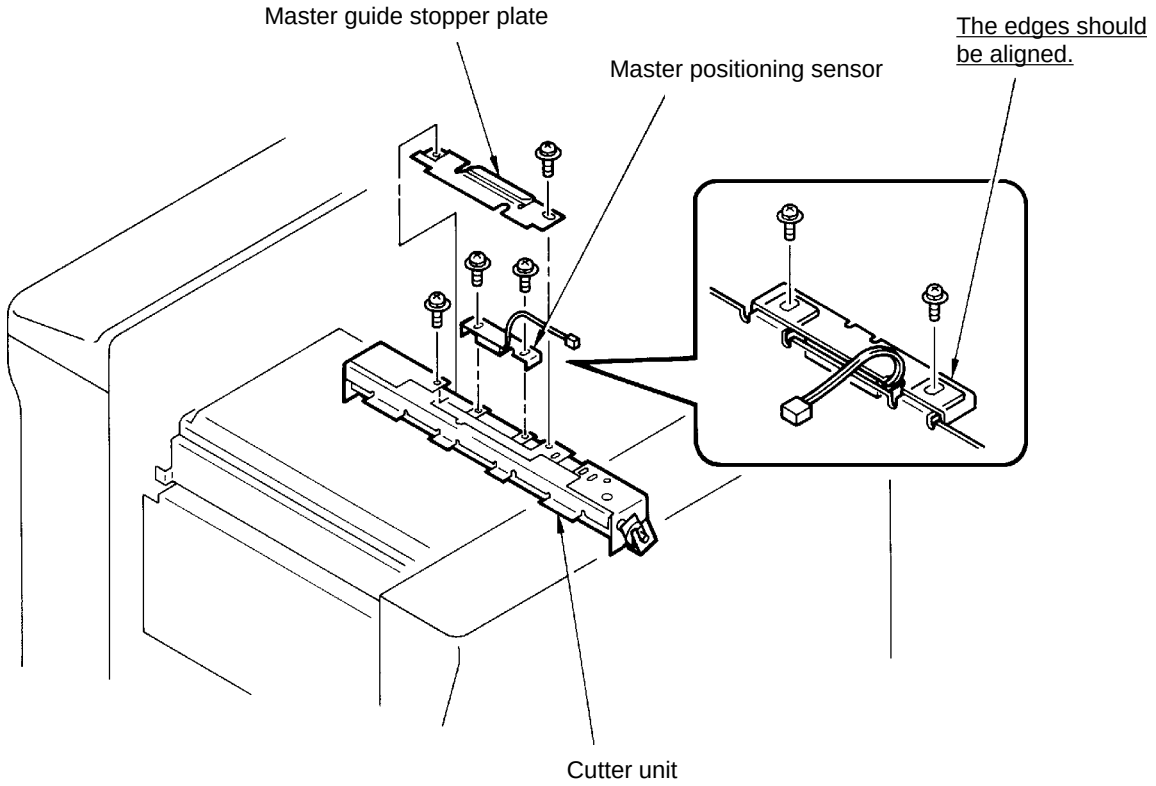
7. Master Positioning Sensor

< Removal Procedure >

1. Turn OFF the power and open the Upper cover (or Scanner table).
2. Disconnect the Master positioning sensor.connector
3. Remove two mounting screws on the Master guide stopper plate and remove the plate.
4. Remove two mounting screws on the Master positioning sensor and remove the sensor.

- Precautions in Assembly -

- Align the side edge of the Master positioning sensor with the front edges of the mounting plates on the Cutter unit.
  If the mounting position of the Master positioning sensor is changed, the length of master to be caught by the Clamp plate will be changed accordingly.



8. Master End/Det. Sensors Ass'y

< Removal Procedure >

1. Turn OFF the power and open the Upper cover (or the Scanner table) and Master loading unit.
2. Remove two mounting screws on the Set guide plate and set aside the plate.
   [Note]
   In the RA5900, the Stopper plate (lower) must be removed to remove the mounting screw of the Set guide plate on the rear side of the machine.
3. Disconnect the Master end detection sensor's assembly connector and remove the Set guide plate from the machine.
   [Note]
   Secure the wires of the counterpart connector with tape before disconnecting to prevent the counterpart connector from slipping inside.
4. Remove two mounting screws on the sensor's assembly and separate it from the Set guide plate.

- Precautions in Assembly -

- Match the holes on both sides of the Set guide plate with the bosses on the brackets when securing the plate.

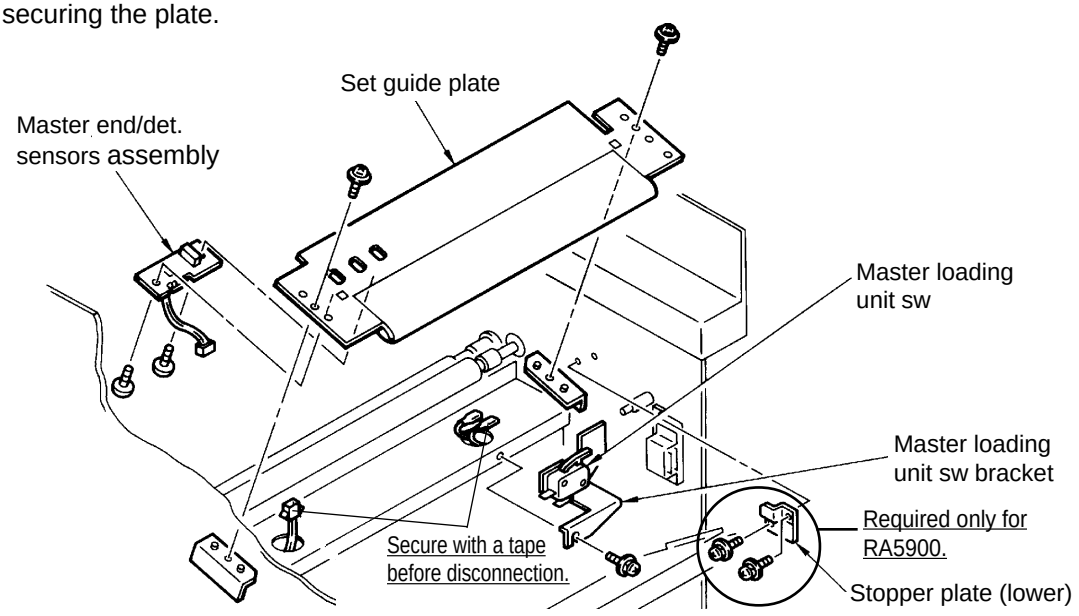
9. Master Loading Unit Sw

< Removal Procedure >

1. Remove and set aside the Set guide plate, referring to the procedures in steps 1 & 2 above.
2. Remove the mounting screw on the Master loading unit switch bracket and remove the bracket with the switch attached.
3. Disconnect the wires from the terminals of the Master loading unit switch.
   [Note]
   Secure the wires with tape before disconnecting to prevent them from slipping inside.
4. Remove two mounting screws on the switch and separate the switch from the bracket.

- Precautions in Assembly -

- Match the holes on both sides of the Set guide plate with the bosses on the brackets when securing the plate.



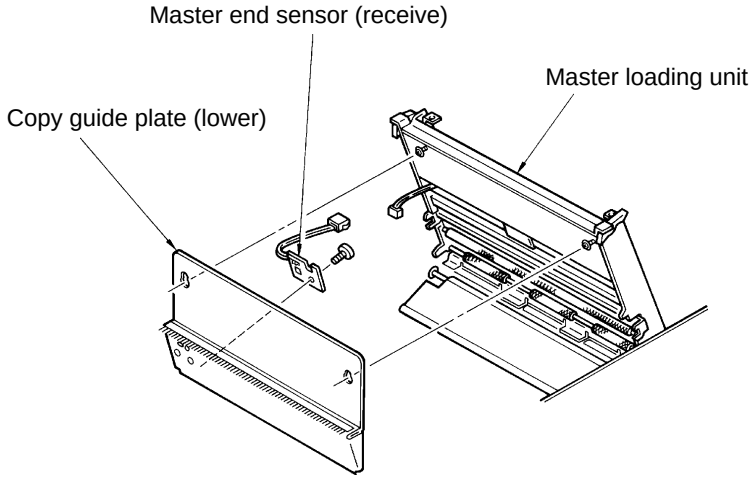
10. Master End Sensor (Receive)

< Removal Procedure >

1. Turn OFF the power and open the Upper cover (or the Scanner table).
2. Open the Master loading unit and loosen two mounting screws on the Copy guide plate (lower).
3. Remove the plate and disconnect the Master end sensor (rcv.) connector, holding the plate.
4. Remove the mounting screw on the Master end sensor (receive) and separate the sensor from the Copy guide plate (lower).

- Precautions in Assembly -

- Be careful not to catch the wires of the sensor by the Copy guide plate (lower).



11. Loading Fan

< Removal Procedure >

Refer to the figures on pages III-18 and III-19 for this removal procedure.

1. Turn OFF the power, open the Upper cover (or the Scanner table) and then the Master loading unit.
2. Remove the mounting screw on the Master holder cover set plate and remove the plate. Pull down the Master roll holder cover and remove it.
3. Remove four mounting screws on the Master roll holder unit and remove the unit.
4. Cut the wire clamper holding the wires of the Loading fan and disconnect its connector.
5. Remove two mounting screws on the Stocker plate A and remove the plate with the Loading fan attached.
6. Remove two mounting screws on the Loading fan and separate the Loading fan from the Stocker plate A.

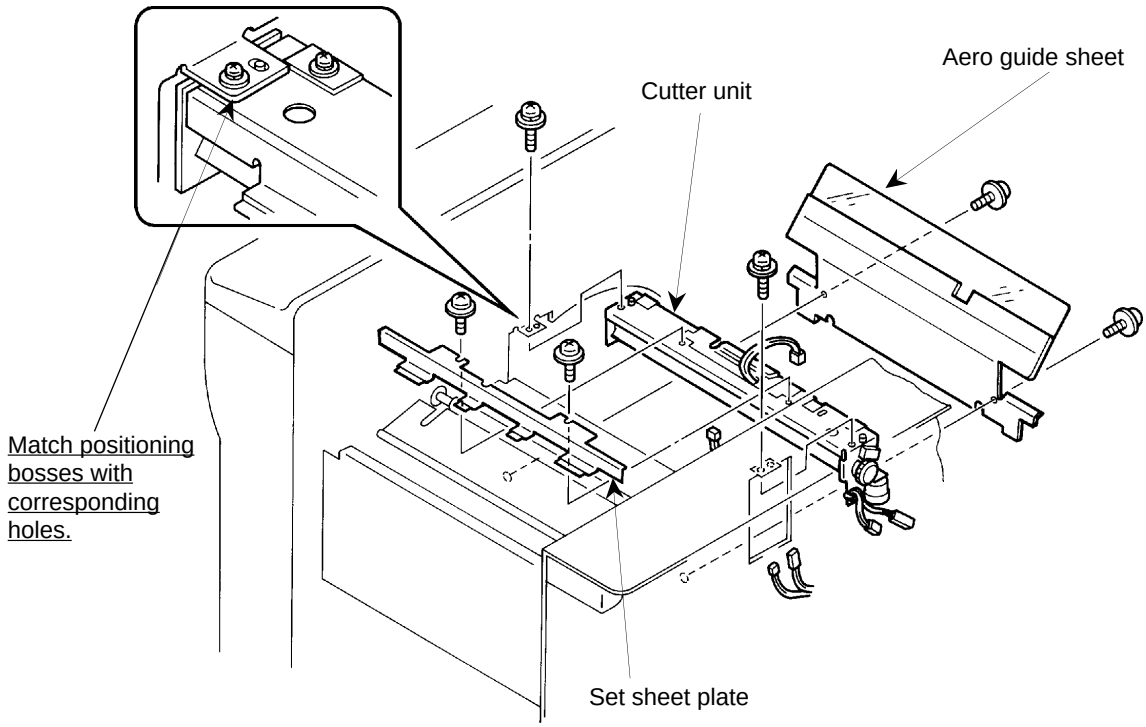
12. Cutter Unit <GR>

< Removal Procedure >

1. Pull out the Drum, turn OFF the power and remove the Back cover.
2. Open the Scanner table. (Remove the Upper cover in GR1750 and 1700).
3. Remove two mounting screws on the Aero guide sheet and remove the sheet.
4. Remove two mounting screws on the Set sheet plate and remove the plate.
5. Disconnect the connector of the Master positioning sensor.
6. Disconnect the connectors of the Cutter motor and Cutter position switch.
7. Remove two mounting screws of the Cutter unit and take out the unit from the opening for the Drum replacement, holding it from underneath.

- Precautions in Assembly -

- Do not bend or damage the green films, i.e. Set sheets A and B.
- Be sure to use M4x6 double-washer screws when securing the Cutter unit.
  (If longer screws are used, they will make contact with the upper Cutter blade and lock it.)
- When mounting the Cutter unit in the machine, match the respective positioning bosses on the unit with the corresponding holes of the mounting brackets.
  If this is not done master wrinkles will occur when loading a master on the Drum.
- After installing the Cutter unit, make sure that the upper Cutter blade rotates with Test mode **No.112**, before setting master material under the green films.



13. Loading Fan <GR3750>
14. Loading Fan <GR2750/1750/1700>

13. Loading Fan <GR3750>

< Removal Procedure >

Refer to the figures on pages III-18 and III-23 for this removal procedure.

1. Turn OFF the power and open the Upper cover (or the Scanner table) and then the Master loading unit.
2. Remove the mounting screw on the Master holder cover set plate, and remove the plate. Pull down the Master roll holder cover and remove it.
3. Remove four mounting screws on the Master roll holder unit, and remove the unit.
4. Cut the wire clampers holding the wires of other sensors and fans on the Stocker ass'y and disconnect the connector of the Loading fan.
5. Remove two mounting screws of the Stocker ass'y and remove the ass'y with the Loading fan attached.
6. Remove two mounting screws on the Loading fan and separate the Loading fan from the Stocker ass'y.

14. Loading Fan <GR2750/1750/1700>

< Removal Procedure >

Refer to the figures on pages III-18 and III-24 for this removal procedure.

1. Turn OFF the power and open the Upper cover (or the Scanner table) and then the Master loading unit.
2. Remove the mounting screw on the Master holder cover set plate, and remove the plate. Pull down the Master roll holder cover and remove it.
3. Remove four mounting screws on the Master roll holder unit, and remove the unit.
4. Cut the wire clamper holding the wires of the Loading fan and disconnect the connector.
5. Remove two mounting screws on the Stocker plate A, and remove the plate with the Loading fan attached.
6. Remove two mounting screws on the Loading fan and separate the Loading fan from the Stocker plate A.